

APPENDIX B-2
Emission Control System Data Parameters

EMISSION CONTROL SYSTEM DATA PARAMETERS

Parameters A	Parameters B	English description	nicht verstand en	Alternativvorschlag/Korr ektur	Intake Gas System (air and EGR)	Engine mode control	Engine tempera tures	Engine dyna mics	OBD	Fuel Injectio n system	Exhaust gas temp eratures	Exhaust system incl. SCR	Vehicle dynamics and drivetrain	Other
AFS_dm	AFS_dm	air -mass flow total			X									
AFS_mAirPerCyl	AFS_mAirPerCyl	air-mass per cylinder and cycle			X									
ASMod_dmEG	ASMod_dmEG	Exhaust gas mass flow from engine		Exhaust gas mass flow from engine	X									
ASMod_dmNOxB asLM_mp	ASMod_dmNOxBasLM _mp	NOx mass flow engine out in 'lean-combustion operation Mode'	X	Base NOx mass flow value after combustion in 'lean-combustion operation Mode'	X									
ASMod_dmNOxE G	ASMod_dmNOxE G	NOx mass flow in the exhaust gas engine out			X									
ASMod_dmPFItU s		exhaust gas mass flow DPF upstream (Diesel particle filter)			X									
ASMod_dvoIPFit EG		calculated exhaust gas volumetric flow in the particle filter			X									
ASMod_rNOxE G	ASMod_rNOxE G	Relative Amount of NOx emission in exhaust gas engine out		Amount of Nox emission in exhaust gas after combustion	X									
ASMod_tIntMnfD s	ASMod_tIntMnfDs	Temperature of the air mass flow after intake cooler	X	Exhaust gas?	X									
BR1_Rad_kmh	BR1_Rad_kmh	average wheel speed of driven wheels											X	
BR3_Fahrtr_HR	BR3_Fahrtr_HR	driving direction of right frontwheel											X	
BR3_Fahrtr_VR	BR3_Fahrtr_VR	driving direction of right rear wheel											X	
BR5_Bremsdruck	BR5_Bremsdruck	unfiltered brake pressure in the master brake cylinder											X	
	BattU_u	Batterie Voltage												X
CACPmp_r	CACPmp_r	PWM setpoint value for control of the charge-air cooler pump		Reference value of charge-air cooler pump	X									
CACPmp_rAct	CACPmp_rAct	actual PWM value for control of the charge-air cooler pump		Actual position of charge- air cooler pump actuator	X									
CEEgt_stLockScr Heat_VW	CEEgt_stLockScrHeat_ VW	Global lock status: SCR heat	X			X								
CEngDsT_t	CEngDsT_t	Coolant temperature engine out		Coolant temperature exiting motor			X							
CEngUsT_t	CEngUsT_t	Coolant temperature engine in		Coolant temperature entering motor			X							

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CEScr_stHeatDem_VW	CEScr_stHeatDem_VW	Status of heating request from SCR coordinator	X									X		
CEScr_tDes_VW	CEScr_tDes_VW	Desired temperature of the SCR catalysator for SCR heating request	X	Desired temperature of the SCR catalyst for SCR heating request								X		
CESys_stOpm_VW_[0]	CESys_stOpm_VW_[0]	Priorized operation modes of system coordinator	X	Priorized operation modes of system coordinator		X								
CL1_Druck	CL1_Druck	refrigerant pressure		coolant pressure										X
CL1_Gebl_last	CL1_Gebl_last	load info of fan control												X
CL1_Kompr_Last	CL1_Kompr_Last	torque loss of the air conditioning system												X
Cpp_trqInrCor_[1]	Cpp_trqInrCor_[0]	Inner torque cylinder 1		adjusted internal torque				X						
	Cpp_trqInrCor_[2]	Inner torque cylinder 3						X						
DFES_ctEntry	DFES_ctEntry	number of allocated fault memory entries							X					
Dl1_km_Stand	Dl1_km_Stand	mileage						X					X	
DStgy_stNoxCnvPrf_MP	DStgy_stNoxCnvPrf_MP	status word for actual NOx reduction potential of the SCR system	X									X		
	Eng_pAmb_VW	Ambient pressure												X
ETCtl_qPol1	ETCtl_qPol1	correction of injection quantity of Postinjection 1 due to the exhaust gas temperature control	X							X				
ETCtl_qPol2	ETCtl_qPol2	correction of injection quantity of Postinjection 1 due to the exhaust gas temperature control	X							X				
ETCtl_tInrDes	ETCtl_tInrDes	Setpoint value of exhaust gas temperature before turbine of the turbocharger										X		
ETCtl_tOutrDes	ETCtl_tOutrDes	Setpoint value of the exhaust gas temperature DPF upstream										X		
	Exh_dmNOxNSCDs	NOx concentration SCR catalytic converter upstream											X	
Exh_pAdapPPFitDiff	Exh_pAdapPPFitDiff	adjusted differential pressure above particulate filter											X	
Exh_pDiffOfsValAct		actual offset value of the differential pressure above particulate filter											X	
Exh_pDynOfsValPPFitDiff		dynamic differential pressure offset value above the particulate filter											X	

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Exh_pSensPPFitDiffRel	Exh_pSensPPFitDiffRel	Exhaust gas pressure upstream Particulate Filter relative to ambient pressure	X	correction value delta for fast downstream pressure of the particle filter, which is subtracted from the measured value (Exh_pSensPPFitDiffRelFast) of the relative pressure over particle filter								X		
Exh_rNOxNSCDs	Exh_rNOxNSCDs	NOx concentration after SCR catalytic converter (downstream)										X		
Exh_tSensCelDs_VW	Exh_tSensCelDs_VW	Exhaust gas temperature after Low pressure EGR-cooler										X		
Exh_tSensOxiCatUs_VW	Exh_tSensOxiCatUs_VW	Exhaust gas temperature before oxidation catalyst										X		
Exh_tSensTOxiCatDs	Exh_tSensTOxiCatDs	Exhaust gas temperature after the oxidizing catalyst										X		
Exh_tSensTPFitDs	Exh_tSensTPFitDs	Exhaust gas temperature after the particulate filter										X		
Exh_tSensTTrbnUs	Exh_tSensTTrbnUs	Exhaust gas temperature before turbine of the turbocharger										X		
ExhFlpLP_rAct	ExhFlpLP_rAct	actual actuator position of the exhaust-gas flap		actuator position of exhaust-gas flap	X									
FISys_dvolFICons	FISys_dvolFICons	Fuel consumption [l/h] from torque-generated injection mass		Fuel consumption [l/h] from torque-generated injection rate							X			
FISys_dvolFIConsAllTot	FISys_dvolFIConsAllTot	actual total fuel consumption (incl. supplementary heating) [l/h]									X			
FISys_vofFIConsAllTot	FISys_vofFIConsAllTot	total fuel consumption per driving cycle [ul]									X			
FuelT_t	FuelT_t	fuel temperature									X			
GE_Fahrprogramm	GE_Fahrprogramm	driving program											X	
GE_Sumpftemperatur	GE_Sumpftemperatur	actual temperature of the ATF		actual temperature of the hydraulic oil in the gearbox sump									X	
GE1_WK	GE1_WK	condition of torque converter clutch	X										X	
GE2_akt_Gang	GE2_akt_Gang	actual engaged gear											X	
GE5_Sta_Fahrstufe	GE5_Sta_Fahrstufe	validity of the engaged gear	X	validity of the Gear Selection									X	
GEC_mChDesLim_VW	GEC_mChDesLim_VW	limit value of combustion-chamber-charge		limit value of combustion-chamber-charge	X									

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GEC_posnVtg_VW	GEC_posnVtg_VW	desired value for the position of the VTG actuator		desired value for the position of the VTG actuator	X														
GEC_rEgrDesLim_VW	GEC_rEgrDesLim_VW	desired value limit of EGR rate			X														
	GEC_rEgrHpDes_VW	Desired EGR rate high pressure			X														
	GEC_rEgrLpDes_VW	Desired EGR rate low pressure			X														
GEC_rFrcDesLim_VW	GEC_rFrcDesLim_VW	desired value limit of the EGR fraction			X														
GEC_rTvhDesLim_VW	GEC_rTvhDesLim_VW	limited setpoint value for pressure ratio throttle valve	X		X														
GEDC_stRIsOpmReqOxiMonAcv_MP_VW		status word containing release conditions for the operation mode request of active oxicat monitor				X													
GEDFe_rMonPasFil_VW		filtered ratio between modelled and simulated differential pressure above low pressure EGR filter		filtered ratio between modelled and simulated differential pressures across low pressure EGR filter	X														
GEDFe_rMonPasOfs_VW		actual adaption value for the filtered ratio of the passive monitor	X	actual adaption value for the filtered ratio of the passive monitor							X								
GEDFe_stRIs_VW		status word of release conditions for the low pressure EGR filter monitor		status word of release conditions for the low pressure EGR filter diagnosis							X								
GEM_mCh_VW	GEM_mCh_VW	virtual overall mass in cylinder			X														
GEM_mCylAirMfsAdp_VW	GEM_mCylAirMfsAdp_VW	adapted cylinder fresh air mass			X														
GEM_mfBrchHpDs_VW		massflow behind high pressure EGR-branch	X	massflow behind high pressure EGR-branch	X														
GEM_mfBrchLpDs_VW		mass flow behind low pressure EGR-branch			X														
GEM_mfDeMfsAdp_VW	GEM_mfDeMfsAdp_VW	mass flow deviation for calculating adaptation of mass flow sensor			X														
GEM_mfEvh_VW	GEM_mfEvh_VW	massflow through high pressure EGR-valve			X														
GEM_mfEvl_VW	GEM_mfEvl_VW	massflow through low pressure EGR-valve			X														
GEM_mfFuCmbOxi0_VW		maximum convertible fuel mass flow in exhaust gas			X														
GEM_mfMfsAdp_VW	GEM_mfMfsAdp_VW	adapted cylinder fresh air mass flow			X														
GEM_mFuPostInj1_VW		fuel mass for postinjection 1										X							
GEM_posnEvh_VW	GEM_posnEvh_VW	relative position of High Pressure EGR valve			X														

GEM_posnEvl_VW	GEM_posnEvl_VW	relative position of Low Pressure EGR valve			X								
GEM_posnTvh_VW	GEM_posnTvh_VW	relative position of throttle valve			X								
GEM_posnVtg_VW	GEM_posnVtg_VW	relative position of variable turbine geometry actuator			X								
GEM_rEgr_VW	GEM_rEgr_VW	total EGR ratio			X								
GEM_tCacDs_VW	GEM_tCacDs_VW	temperature downstream of the charge air cooler	X	temperature downstream of the charge air cooler			X						
GEM_tCacUs_VW	GEM_tCacUs_VW	temperature upstream of the charge air cooler		temperature upstream of the charge air cooler			X						
GEM_tPfilSrfc_VW	GEM_tPfilSrfc_VW	temperature of particulate filter surface								X			
GK2_BEM_P_Generator	GK2_BEM_P_Generator	generator power											X
GlbDa_ITotDst	GlbDa_ITotDst	Distance travelled since first start		Distance travelled since first start								X	
GM3_MoSoMom	GM3_MoSoMom	from gearbox requested engine torque										X	
InjCrv_phiMI1CS_CCor	InjCrv_phiMI1CS_CCor	angle correction of start of main injection	X	start of override control of MI1					X				
	InjCrv_phiPil1Des	Desired injection timing (in angle) for Pilot Injection 1							X				
	InjCrv_phiPil2Des	Desired injection timing (in angle) for Pilot Injection 2							X				
	InjCrv_phiPol1Des	Desired injection timing (in angle) for Post Injection 1							X				
	InjCrv_phiPol2Des	Desired injection timing (in angle) for Post Injection 2							X				
	InjCrv_phiPol3Des	Desired injection timing (in angle) for Post Injection 3							X				
	InjCrv_qPil1Des_mp	setpoint value for injection quantity of Pilot injection 1							X				
	InjCrv_qPil2Des_mp	setpoint value for injection quantity of Pilot injection 2							X				
InjCrv_qPol1Des_mp	InjCrv_qPol1Des_mp	setpoint value for injection quantity of postinjection 1							X				
InjCrv_qPol2Des_mp	InjCrv_qPol2Des_mp	setpoint value for injection quantity of postinjection 2							X				

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	InjCrv_qPol3Des_mp	setpoint value for injection quantity of postinjection 3								X				
InjCrv_stInjCharSetVal	InjCrv_stInjCharSetVal	setpoint value for injection pattern	X	desired behavior of injection value (simultaneous rotational speed)						X				
InjCtl_qSetUnBal		injection quantity mass without quantity compensation control	X	desired behavior of injection value without amount compensation control						X				
InjSys_qTot	InjSys_qTot	total injection quantity								X				
KO1_Tankinhalt	KO1_Tankinhalt	Remaining fuel quantity in tank	X	Remaining fuel quantity in tank						X				
KO3_Radumfang	KO3_Radumfang	mean wheel circumference in millimeters												X
MO_Heizstrom_SCR	MO_Heizstrom_SCR	Total electric current used for heating SCR system		Total current used for heating SCR system								X		
MO_Istgang	MO_Istgang	actual gear for display in gear shift recommendation											X	
MO_Sollgang	MO_Sollgang	recommended gear for display in gear shift recommendation											X	
MO1_Drehzahl	MO1_Drehzahl	engine speed					X							
MO1_Kup_schalt	MO1_Kup_schalt	clutch switch, only manual transmission.		clutch switch, only manual transmission.									X	
MO1_Pedalwert	MO1_Pedalwert	actual value of accelerator pedal position		Pedal input value for E-gas cars									X	
MO2_Kuehlm_T	MO2_Kuehlm_T	engine coolant temperature		engine coolant temperature			X							
MO3_Aussentemp	MO3_Aussentemp	ambient air temperature												X
MO5_DPF_reg	MO5_DPF_reg	Bit: DPF-Regeneration active										X		
MO5_Luefter	MO5_Luefter	actual state of radiator fan control via PWM interface												X
MO5_Verbrauch	MO5_Verbrauch	actual Fuel consumption	X							X				
MO6_Ist_Moment	MO6_Ist_Moment	actual torque					X							

EMISSION CONTROL SYSTEM DATA PARAMETERS

MO7_Ladedruckneu	MO7_Ladedruckneu	Boost pressure		Boost signal for dashboard (Porsche Colorado, PQ35 Bi-Turbo, Audi RS6, TT-R)	X												
MO7_Oeltemp	MO7_Oeltemp	oil temperature					X										
MO7_StaGluehk	MO7_StaGluehk	switch-on state of glow-plug heating in percent															X
PCR_pActVal_VW	PCR_pActVal_VW	Charge air pressure actual value			X												
PCR_pDesVal_VW	PCR_pDesVal_VW	setpoint value for Charge air pressure			X												
PEGRLPDif_pAdap	PEGRLPDif_pAdap	adapted value of Low-Pressure EGR differential pressure sensor			X												
PFit_dmPFitMonEG_mp		monitored exhaust gas mass flow through particulate filter		monitored exhaust gas mass flow through particle filter													X
PFit_dvolPFitMonEG_mp		monitored exhaust gas volumetric flow through particulate filter		monitored exhaust gas mass flow through particle filter													X
PFit_pAdapPPFitDiffFit_mp	PFit_pAdapPPFitDiffFit_mp	filtered differential pressure above particulate filter		filtered differential pressure at particle filter after PT1													X
PFit_pDiffCharMonMinFullL_mp		threshold for minimum differential pressure at loaded particulate filter		measuring point of threshold for minimum differential pressure of fully loaded particle filter characteristic													X
PFit_stCondMonChar		release condition for monitoring of particulate filter															X
PFit_tiSumRgnMaxTmr		regeneration time of uncomplete regeneration of Particulate filter															X
PFitLd_mSotMeas	PFitLd_mSotMeas	soot mass of particulate filter calculated from differential pressure above Particulate filter															X
PFitLd_mSotSim	PFitLd_mSotSim	simulated soot mass of particle filter		simulated soot mass of particle filter													X
PFitRgn_ISnceRgn	PFitRgn_ISnceRgn	driven distance since last successful regeneration															X
PFitRgn_numEngPOp	PFitRgn_numEngPOp	state of regeneration after consideration of engine operating state	X														X
PFitRgn_stIntr	PFitRgn_stIntr	status word for reason of regeneration interruption															X
PthSet_trqInrSet	PthSet_trqInrSet	setpoint value for internal torque						X									

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	Rail_pSetPoint	setpoint value for rail pressure								X				
RailP_pFlt	RailP_pFlt	actual rail pressure (maximum rail pressure from the past 10ms)								X				
SCRChk_rNOxSensAvrgQlyDetn	SCRChk_rNOxSensAvrgQlyDetn	averaged measured value of NOx-concentration at end of diagnosis								X				
SCRChk_rNOxThdAvrgQlyDetn	SCRChk_rNOxThdAvrgQlyDetn	averaged threshold value for NOx-concentration at end of diagnosis								X				
SCRctl_tAvrg	SCRctl_tAvrg	average temperature in Urea (DEF)-Tank	X	filtered temperature SCR									X	
SCRFFC_dmNOxUs	SCRFFC_dmNOxUs	NOx mass flow upstream of SCR-System	X	Untreated NOx emission									X	
SCRFFC_rPPMN OxUs	SCRFFC_rPPMN OxUs	Untreated NOx emission upstream of SCR-catalytic-converter	X	Untreated NOx emission									X	
SCRFFC_rPPMN OxUsCat2	SCRFFC_rPPMN OxUsCat2	Untreated NOx emission upstream of underfloor NH3 slip catalyst	X	Untreated NOx emission									X	
SCRldG_dmNH3Limit_mp	SCRldG_dmNH3Limit_mp	maximum actual NH3 dosing quantity		NH3 dosage limit in SCRcat									X	
SCRldG_dmNH3MetAdap	SCRldG_dmNH3MetAdap	adapted NH3 dosing quantity											X	
SCRldG_dmRdcAgtLimitVehVNOx_MP	SCRldG_dmRdcAgtLimitVehVNOx_MP	NH3 dosing quantity limitation dependent on vehicle speed and NOx mass flow											X	
SCRldG_mNH3LdNom	SCRldG_mNH3LdNom	setpoint value for NH3 level inSCR catalytic converter	X	NH3 tank fluid level full									X	
SCRldG_mNH3LimBuf	SCRldG_mNH3LimBuf	NH3 level of reserve storage		mNH3 reserve tank fluid level									X	
SCRMod_mEstNH3Ld	SCRMod_mEstNH3Ld	current value of NH3-level in SCR catalytic converter		actual mNH3 tank fluid level									X	
SCRMod_rPPMN H3Slip	SCRMod_rPPMN H3Slip	NH3 slip											X	
SCRMod_tAvrg	SCRMod_tAvrg	mean temperature of SCR catalytic converter		average temperature of SCR catalyst									X	
SCRMon_stRelsPCtrl	SCRMon_stRelsPCtrl	status of release-conditions for transition to the condition PRESSURECONTROL		status of release for transition to the NOPRESSURECONTROL condition									X	
UDC_dmRdcAgAct	UDC_dmRdcAgAct	actual mass flow of reducing agent	X	actual dosed mass flow of reductant									X	
UDC_dmRdcAgDesCoPr	UDC_dmRdcAgDesCoPr	mass flow setpoint of reducing agent for component protection function		desired dosage of component protection function									X	
UDC_mRdcAgDosQnt	UDC_mRdcAgDosQnt	longtime dosing quantity											X	

UDC_mRdcAgD sQntTmp_mp	UDC_mRdcAgDosQnt mp_mp	temporary dosing quantity											X		
UDosVlv_rPs	UDosVlv_rPs	duty cycle of output signal of dosing valve output stage	X										X		
	UEGO_rLamS1B1	Current value of Lambda Sensor											X		
UEGO_stLamQly S1B1	UEGO_stLamQlyS1B1	signal quality of lambda sensor		lambda signal quality sensor 1 Bank 1						X					
UTnkCLS_stSens	UTnkCLS_stSens	status signal of the combined level- and temperature sensor in Urea Tank											X		
	Veh_v_VW	Vehicle speed												X	